

FOREWORD

On behalf of the Organizing Committee, it is my great pleasure to welcome you to the sixth International Symposium on Photonics and Electromagnetic Crystal Structures (PECS-VI), Crete, Greece, on June 19-24, 2005.

Previous PECS Symposiums:

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| 1999 | Laguna Beach, California, USA | 2000 | Sendai, Japan |
| 2001 | St. Andrews, Scotland, UK | 2002 | Los Angeles, California, USA |
| 2004 | Kyoto, Japan | | |

Photonic and electromagnetic crystals, which offer unprecedented control of photons, have emerged as an important new class of optical materials. Recent remarkable developments in analysis, calculation, and nano-fabrication techniques enable us to design and fabricate desired photonic crystal structures and devices. Novel photonic nanostructure devices, such as ultrasmall channel add/drop filtering devices, new type of lasers, etc., are rapidly developing, especially using 2D photonic crystal slabs. Construction of full 3D photonic bandgap crystals continues to be studied, aiming at developing photonic chips, including various ultrasmall components by using semiconductor processes, self-assembly methods, and photo-assisted process technologies, and so on. In addition, research topics are expanding to other aspects of photonic crystals. Recent interests include meta-materials, left-handed materials, negative refractive indices, etc. Novel applications, such as a lens that can focus light beyond the limits of classical optics and slowing or even stopping light inside the photonic crystal, are being investigated.

At PECS-VI, we plan to discuss and define the direction of the ever-changing, exciting fields of photonics and left-handed materials. The overwhelming submission of more than 350 contributions from 28 countries shows the international interest in these exciting fields. The five-day symposium will have four-poster sessions presenting over 260 contributions during the afternoons, Monday–Thursday. The Friday afternoon session is a workshop on technology issues in photonic crystals organized by Thomas Krauss (St. Andrews) and Wim Bogaerts (Ghent). A total of 40 invited talks and 42 contributed talks will be presented during the morning and evening sessions. There will be time for stimulating discussions during PECS-VI.

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